ORM for Kids

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[A ship's safety officer talks to his shipmates about operational risk management.—Ed.]

I'm not a person who likes to brag, but I'm proud that, in almost 4,000 hours of flight time, my only pilot-induced damage to an aircraft was overspeeding the flaps on a T-34. It happened on my third flight in flight school. To those who ask how that's possible, I say, "It's a lot of luck, some divine intervention, some good supervision, and a whole lot of ORM."

I didn't realize it at the time, shipmates, but I was taught ORM almost as soon as I could walk. I now teach it to my kids at home, and I want you to think about and use ORM on a minute-by-minute basis, too. My kids don't know these buzz words of ORM, but you do:

Identify Hazards

Consider the major steps in an operation and identify any real or potential condition that can cause mission degradation, injury, illness, or death to personnel, or damage or loss of equipment or property.

Assess Hazards

For each hazard, determine the degree of risk in terms of probability and severity of loss from exposure to the hazard.

Make Risk Decisions

Develop possible risk-control options and evaluate their cost and benefit. The appropriate decision-maker uses cost-versus-benefit analysis to choose the best control(s).

Implement Controls

Plan for the commitment of resources to implement control(s) to eliminate the hazard or reduce the risk.

Supervise

Be proactive and follow up with checks on the effectiveness of control(s).

My kids, however, do get continual training on managing risk, just like I did from my dad. Except in the case of heinously dangerous activities, I do my best to avoid saying "no" to anything. Risk avoidance is not the game here; risk management is.

Instead, I try to be aware when planning or executing anything. I ask questions like, "What's the worst thing that can happen if you do that?" I also may ask questions like these: "How much of your allowance will you have to pay me if something gets broken?" "Do you remember how much it hurt when you fell out of that tree last week?" My goal is to get them thinking about the risk, so that, eventually, they

Are these people thinking about what they're doing?

Even dangerous stuff like this can be done with minimal risk.

will assess every evolution on their own, without my having to ask such questions.

Once they see the risk, I get into risk management. The first thing I teach them to do is ask if the benefit is worth the risk. Then I teach them to ask these questions: How can we minimize the risk? What things (controls) can we do to reduce the risk to an acceptable level? Supervision is critical, as well—not just to make sure everyone behaves, but to make sure the controls we have put in place actually are working.

A good pre-flight/planning brief is important, but even more critical is the post-flight brief, especially if things didn't go exactly as planned. Learning lessons and using that information in the next planning cycle is critical—reinventing the wheel is a terrible waste of resources. A one-time failure can be painful, but it also can be valuable if you use the information you gained. Even better, use someone else's failure as a learning tool.

The CO mentioned ORM this morning. He talked about how naval reactors have a concept of "expected response." Before you do anything, whether it's to throw a switch or to open a valve, you should know what usually happens next—because, if you throw that switch and don't get the expected response, something is wrong with the system. That indication should be a cause for concern and alarm, especially if you're dealing with machinery that could cost people their lives. As an operator, you need to make sure you're getting the expected response, so if you need to stop for a minute to check it out, do so.

What am I getting at here? Everything you do each day, from the time you get up to the time you go to bed, should be a continual process of assessing risks and managing them. In the last few weeks, we have had a series of liberty- and work-related incidents where, if people had been thinking about the possible risks, they probably wouldn't have put themselves in a dangerous position.

If you're testing machinery and haven't assessed or don't understand the risks beforehand, you're making a big mistake. If you're committing a crime that will land you in jail and haven't thought about what your jail experience will be like (with Bubba—or Bertha—and his—or her—big, nasty friends), you'll be sorry. Ask around; there are too many unnecessary stories of shipmates failing to consider the risks, on and off duty, of what they are doing. Learn from their mistakes.

Walk, talk and eat risk management. You still may get into mishaps, but, at least, they won't be due to your poor planning and lack of risk management. Chances are good that your personal mishap rate will be next to nothing, and, after all, that's our goal here.

Take care of yourself, and help me out by taking care of your shipmates.

For more info, go to: http://safetycenter.navy.mil/presentations/orm/default.htm.